

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
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PRODUCT EVALUATION

SK-36

Effective July 1, 2012
Revised August 1, 2012

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **December 2014**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Tubular Skylights “Illuminator” Model, Impact Resistant, manufactured by:

ODL, Inc.
215 E. Roosevelt Ave.
Zeeland, MI 49464
Telephone: (616) 748-5437

and distributed by

Owens Corning
One Owens Corning Parkway
Toledo, OH 43659
Telephone: (419) 376-8360

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions, the design drawings specified in this evaluation report, and this product evaluation report.

PRODUCT DESCRIPTION

The Tubular Skylight “Illuminator” Model is a skylight with a polycarbonate dome with aluminum flashing. The tubular skylights specified in this evaluation report are impact resistant skylights. This product evaluation report is for tubular skylights based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Illuminator 10” Severe Weather	R-PG100 (10) Diameter – Type TDD
2	Illuminator 14” Severe Weather	R-PG100 (14) Diameter – Type TDD

Product Dimensions:

System	Dome Size	Reflective Adjustable Tube Size	Glass Diffuser Lens Assembly	Flashing Size
1	10” x 6 ¾”	9 ½”	12” Diameter	22” diameter x 6” H
2	14” x 7 ¾”	13 ½”	16” Diameter	26” diameter x 6” H

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1 & 2	SG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

SG-1: The skylight utilizes a nominal 0.115" thick polycarbonate dome. The polycarbonate dome utilizes light diffusers in its construction.

Glass Method Key:

GM-1 The dome is sealed to the flashing with a 0.472" wide by 0.394" thick closed cell gasket. The dome is secured to the flashing with four equally spaced no. 8 x ¾" screws and self-sealing washers.

Flashing:

Systems 1 and 2: The flashing is constructed of 0.026" spun aluminum and utilizes a 90 degree, 6" high upward bend.

Glass Diffuser Lens Assembly Construction: The assembly is constructed of a plastic ceiling ring that is secured to the ceiling with four screws with flip tabs. The face of the plastic ceiling ring against the ceiling utilizes a layer of foam gasket tape along the outer perimeter. The inner perimeter, where the reflective adjustable tube is located, and the inner perimeter of the opposite face of the ceiling ring, where the glass diffuser is located, utilize kerf-mounted hollow bulb seals. Tape is applied to the same surface at three locations to seal three holes through the ceiling ring. The tempered glass diffuser lens is set against a plastic trim piece with two glass lenses on top of the diffuser.

Product Identification: A certification program label (Keystone Certification Program) will be attached to the skylight. The certification program label includes the product name; performance characteristics; and approved inspection agency (Keystone) to indicate compliance with the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-08 and ASTM E 1886 and E 1996-05.

Label Identification:

System	Model	Certification Authorization Report (CAR) number
1	Illuminator 10" Severe Weather	152-118 / 152-204
2	Illuminator 14" Severe Weather	152-118/ 153-204

Impact Resistance: These skylight assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland I zone** and the **Seaward zone**. These skylight assemblies passed Missile Level D specified in ASTM E 1996-05. The skylight assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These skylight assemblies will not need to be protected with an impact protective system.

Acceptance of Smaller Assemblies: Skylight assemblies with dimensions equal to or smaller than those specified in this evaluation report are acceptable within the limitations specified in this report.

LIMITATIONS

Design Pressures:

System	Dome Size	Design Pressures (psf)
1	10" x 6 ¾"	± 100
2	14" x 7 ¾"	± 100

INSTALLATION INSTRUCTIONS

General: The skylight assembly shall be prepared and installed in accordance with the manufacturer's recommended installation instruction, the approved drawings referenced below, and this evaluation report. Detailed installation instructions and component drawings are available from the manufacturer.

Design Drawings: The skylights shall be installed in accordance with Drawing No. TX-4137, titled "Tubular Skylight "Illuminator" Model," sheets 1 through 2 of 2, dated January 4, 2012, signed and sealed by Lyndon F. Schmidt, P.E. on April 17, 2012. The stated drawings will be referred to as the approved drawings in this evaluation report.

Roof Deck Construction: The skylights shall be secured to a minimum 7/16" thick OSB.

Installation: The skylights shall be installed as specified in the approved drawings.

Note: The manufacturer's installation instructions and the approved drawings shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.